8 December 1986

MEMORANDUM FOR THE RECORD

SUBJECT: Interactive TV--Applications

- 1. The following are highlights of a briefing given by Thomas Donahue, Dean of Students/Minneapolis College of Art Design on Interactive TV. Donahue is a practitioner of long standing in this field and having set up his own company to produce interactive TV (which he subsequently sold) and has been working in the field for a number of years. Donahue is also a consultant we may want to get in touch with. Some highlights:
- --Donahue demonstrated an interactive TV course on using the personal PC. He showed about 15 to 20 minutes of the course off and on during the three-hour lecture. It looked to be very good.
- --I think we ought to purchase the course. It is available through Health EduTech just located in Minneapolis. Their number is 612-831-0445.
- --I gather the course is in five segments including such things as "introduction to personal computers" all the way to a section on applications for the PC. Each segment or separate course costs about \$1,000. It's designed to run on most of the common interactive TV lash-ups including Pioneer laser disks--which Donahue claims is pretty much becoming the agency standard--an IBM or IBM-compatible personal computer and a monitor, probably a Sony.
 - 2. Some of the highlights of Donahue's lecture:
 - --He recommends using the names of students a lot.
 - --lots of audio.
 - -- maximize the number of correct answers.
- --you must appeal to the different styles of learning--reading--audio--video. Some individuals are very heavily into one style over another. The population is pretty evenly divided amongst the three in terms of the basic learning tendency of the individual.

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- --based on laboratory studies including ones that conducted in connection with the marketing of interactive personal computer course, adults' attention span in watching video is a maximum of 40 seconds. After 40 seconds, their attention begins to wander. It does not necessarily mean that they do not come back to the subject matter only that 40 seconds into it they begin thinking about other things. His lesson has long since been learned by TV producers; you must keep the video (i.e., the "takes") as short as possible. You must make the TV as interactive as possible—there are lots of ways of doing that.
- --people get lost in the menus very easily. You must keep menus down to two levels. Also, highlight the sections that are completed by using a check, an "x" or color by the number.
- --use "dual" audio tracks. The audio for a help command ought to be completely different from the original, that is, when a person asks for some help, it makes more sense to give him additional information or, at least, different verbiage rather than repeating what he has already heard.
- --it is important to realize that you're not just teaching facts but also engendering feeling. The feelings "I can do that!" is something that you want the individual to come away with. In the personal computer course, he has some examples of the student using the cursor to get through a maze as helping to create that feeling.
- --pre-tests turn people off. They are too negative--students get too many things wrong--they start off on the wrong foot. He has had clients that have made him give pre-tests and then post-tests. So his feelings about this are based on experience. He has no problems with post-tests, of course--major universities at work in interactive TV are the University of Minnesota, the University of Nebraska, and Brigham Young University. DEAC is one of the pioneers in the use of interactive TV.

--DEAC ran an experiment with two groups of repairmen, half of whom had traditional classroom and hands-on instruction on how to make their repairs on telephone equipment and half of whom only had an interactive TV on how to make the repairs. Then the repairmen went to the field and, under supervision, serviced customers. The results were that the interactive TV students did slightly better than the students who had classroom and hands-on training. However, the interactive TV students spent half the time in learning these skills than the repairmen in the classroom.

--studies show that retention for interactive TV is about the same or a little bit better than for other methods.

--you can get a check disc made for \$300.00. Lists of interactive are available from 3M, Visage, and NCR (also, I have a copy of courseware put out by Sony).

Other points I picked up at the conference:

- a. There is an interactive TV program on learning to remember names that is based on a foreign embassy cocktail party. I saw about five or ten minutes of it. It is very good, amusing and I think it would really be fun for students
- b. A lot of people are working interactive TV and courseware is now becoming available.
- c. I brought back information from Wicat some of the courseware that they have been working on a couple of years ago--this is just CBT--is now available. Included are some material for English as a Second Language, Basic Writing, French, Typing, and perhaps one of two others that might have some application for us.
- d. The only problem with the Wicat is that you must buy their CPU, from which you can hang IBM PC's. The CPU costs about \$18K. This is something that we should follow up on.

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4. I am convinced that we <u>must</u> do a better job of attacking the three or four top conferences, trade shows, that take place in the course of the year. Essentially, we are talking about technology transfer. Transferring the best of that smart work that is being done out there in the country back into our environment. In order to do this, however, we must mount a systematic, planned attack. This is not really difficult to do, it just means paying attention to it and doing it. For example, just on the basis of my own experience and what Wayne has told me, I would say that we should have had two or three or four individuals at the Conference dedicated to doing nothing else but going through the exposition looking for particular kinds of material. The offerings of the expositions were rich enough that it would take an individual a good solid two days to get through the exhibits.

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